

LISTING OF THE CLAIMS

The following Listing of the Claims replaces all prior listings of the claims within this application.

1. (currently amended) A method for fabricating an inductor structure comprising:

providing a substrate;

forming over the substrate a single spiral planar spiral conductor layer to form a single spiral planar spiral inductor, wherein a successive series of spirals within the single spiral planar spiral conductor layer is formed with a continuous variation in at least one of:

a series of linewidths of the successive series of spirals; and

a series of spacings separating the successive series of spirals.

2. (currently amended) A method for fabricating an inductor structure comprising:

providing a substrate;

forming over the substrate a planar spiral conductor layer to form a planar spiral inductor,
wherein a successive series of spirals within the planar spiral conductor layer is formed with a
continuous variation in at least one of:

a series of linewidths of the successive series of spirals; and

a series of spacings separating the successive series of spirals. ~~The method of~~
~~claim 1~~ wherein by employing within the successive series of spirals within the planar spiral conductor layer the variation in at least one of the series of linewidths of the successive series of spirals and the series of spacings separating the successive series of spirals, the planar spiral inductor is fabricated with an enhanced Q value.

3. (canceled)

4. (currently amended) A method for fabricating an inductor structure comprising:

providing a substrate;

forming over the substrate a planar spiral conductor layer to form a planar spiral inductor,
wherein a successive series of spirals within the planar spiral conductor layer is formed with a
continuous variation in at least one of:

a series of linewidths of the successive series of spirals; and

a series of spacings separating the successive series of spirals. ~~The method of~~
claim 1 wherein the successive series of spirals is formed in a shape selected from the group
consisting of a triangle, a square, a rectangle, a higher order polygon, a uniform ellipse, ~~a non-~~
~~uniform ellipse~~ and a circle.

5. (original) The method of claim 1 wherein the planar spiral conductor layer is formed of a
conductor material selected from the group consisting of non-magnetic metal, non-magnetic
metal alloy, magnetic metal, magnetic metal alloy, doped polysilicon and polycide conductor
materials, and laminates thereof.

6. (original) The method of claim 1 wherein the variation in the series of linewidths of the
successive series of spirals is an increasing progression of linewidth from a first spiral which
defines the center of the planar spiral inductor having a comparatively narrow linewidth to a
final spiral which defines the perimeter of the planar spiral inductor having a comparatively wide
linewidth.

7. (original) The method of claim 6 wherein the comparatively narrow linewidth is from about 7
to about 10 microns and the comparatively wide line width is from about 17 to about 21 microns.

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8. (original) The method of claim 1 wherein the successive series of spirals comprises from about 1 to about 8 spirals.

9. - 15. (canceled)

16. (currently amended) The method of claim 1 wherein:

~~the planar spiral conductor layer is a single spiral planar spiral conductor layer; and~~
the continuous variation is a progressively increasing or decreasing continuous variation.
